

HAND RAKING

What is Hand Raking?

The upper part of the soil profile is tilled and mixed across the slope on the contour using hand tools. The purposes of this practice are to break up the hydrophobic characteristics of soil in moderate and severely burned areas, to aid in the establishment of vegetative cover from seed, to reduce runoff velocity, to increase infiltration, and to reduce erosion.

When is Hand Raking Used?

Hand Raking is used on burned upland areas with hydrophobic soil properties that are too small for efficient use of machines, or are not accessible by machines due to slope steepness or presence of obstructions. Slopes with a stable rock face do not require Hand Raking. Hand raking is not used in swales, drainage ways, gullies, or other areas of concentrated flow.

How is Hand Raking Performed?

Laborers outfitted with rakes, hoes, polaskis, or other adequate hand tools, and appropriate protective gear, loosen and mix the soil to a depth of 2 to 4 inches over the areas to be treated. The entire slope may be raked to achieve the maximum effect. To reduce treatment costs on large areas hand raking can be accomplished in 8 to 12 foot wide strips spaced uniformly over the slope. A contour line is marked about 1/3 the way down the slope to establish a key line. The strips are marked and raked parallel to the key line. The maximum recommended spacing between strips is shown below:

Slope Gradient (percent)	Raked Strip Spacing (feet)
< 5 %	160
5 - 10 %	120
10 - 20 %	60
20 - 30 %	30
> 30 %	15